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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,820

08/25/2008

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GHER3001/FJD

6523

23364 7590 04/19/2011

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EXAMINER

RAHMAN, MOHAMMAD L

ART UNIT

PAPER NUMBER

2438

MAIL DATE

DELIVERY MODE

04/19/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/585,820	Applicant(s) WITTMER ET AL.	
	Examiner MOHAMMAD L. RAHMAN	Art Unit 2438	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to arguments/amendments filed on 01/26/2011. Claims 2 and 3 have been amended. Claim 1 has been canceled. New claim 4 has been added. Claims 2-4 are pending.

Response to Arguments

Applicants' arguments/amendments regarding priority, see page 4 of REMARKS, filed 01/26/2011, have been fully considered and persuasive. The objections have been withdrawn.

Applicants' arguments/amendments to the specification, see page 4 of REMARKS, filed 01/26/2011, have been fully considered and persuasive. The objections have been withdrawn.

Applicants' amendments, see page 4 of REMARKS, filed 01/26/2011 with respect to claims 2-3 have been fully considered and are persuasive to overcome rejection under 35 U.S.C. § 112, first paragraph. The rejections of claims 2-3 set forth in last office action under 35 U.S.C. § 112, first paragraph have been withdrawn.

Applicants' amendments filed, see page 6 of REMARKS, with respect to claims 2-3 have been fully considered and are persuasive to overcome rejection under 35 U.S.C. § 101. The rejections of claims 2-3 set forth in last office action under 35 U.S.C. § 101 have been withdrawn.

Independent claim 1 has been canceled and new independent claim 4 has been added. Applicant's newly added claim 4 filed 01/26/2011, necessitated the new ground(s) of rejection presented in this office action. Hence, Applicant's arguments regarding prior art on the record have been considered but are moot in view of the new ground(s) of rejection. Kadyk et al. US 6,674, 767 has been introduced to address the newly added claim.

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Applicants present no further arguments. For the above reasons, it is believed that the rejections should be sustained. Accordingly, THIS ACTION IS MADE FINAL. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Claim Objections

Claims 2 and 3 are (depends from claim 4) are objected to under 37 CFR 1.75 (c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in dependent form.

A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 4 is rejected under 35 U.S.C. 102(a)/(e) as being anticipated by Kadyk et al. US 6,674,767 hereinafter “Kadyk”.

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Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.

Regarding Claim 4 (New), Kadyk teaches a method for exchanging data between an operating tool or a control unit and a plurality of field devices via a communication network (Kadyk, col. 2, lines 36-40, " In accordance with the present invention, a flexible gateway is provided. The gateway accommodates data transfer from a data origination device over a wide variety of networks to a wide variety of destination devices, even if those networks use different protocols, and even if the devices recognize different data formats."; col. 2, lines 62-65 "The gateway calls the appropriate device and network drivers associated with the specific device and network to create a chain of driver modules customized to the destination device and destination network."), comprising the steps of:

storing corresponding device drivers (fig. 4, item 414) for the field devices, whereby a device driver encapsulates all data and functions of the corresponding field device (col. 10, lines 40-46; col. 12, lines 38-41; col. 12, lines 61- col. 13, lines 4; col. 14, lines 39-50) and whereby the device driver provides a graphical user interface (fig. 4, item 412);

providing an encryption driver (fig. 4, item 418) which is embodied as an independent and separately exchangeable software module stored in the operating tool or the control unit (col. 10, lines 46-48; col. 13, lines 4-6; col. 14, lines 8-15);

encrypting the data in the encryption driver via a corresponding algorithm (col. 15, lines 25-27) ;

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exchanging the encrypted data between the operating program stored in the operating tool or the control unit and the field device with the aid of a communication driver (col. 15, lines 8-16, 25-27) ; and

unencrypting the exchanged data in the field device and executing the corresponding commands (col. 13, lines 6-8, messages (data) are decrypted in remote devices (i.e. field devices) to execute application/commands.).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadyk in view of “PROFIBUS Technology and Application System Description, Version October 2002” hereinafter “PROFIBUS”.

Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.

Regarding claim 2, Kadyk taught the method as claimed in claim 4, Kadyk was silent on, wherein: the software module meets the FDT/DTM standard.

However, the analogous art PROFIBUS which addressed the same field of endeavor in system integration taught the software module meets the FDT/DTM standard (see [Page 27: 7.3 *FDT/DTM Concept*] “*The FDT Interface: The FDT specification of FDT is contained in the PROFIBUS guideline 2.162, Device Description as Software Component: The specific functions and dialog of a field device for parameterization, configuration, diagnosis and maintenance, complete with user interface, are mapped in a software component. This component is called the DTM (Device Type Manager) and is integrated in the engineering tool or control system over the FDT interface*”).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicants’ invention was made to modify the invention of Kadyk with the teaching of PROFIBUS for the use of FDT/DTM standard because the use of PROFIBUS could be able to provide Kadyk the ability to include FDT/DTM standard (PROFIBUS, page 27, fig. 31) in Kadyk’s application module (Kadyk, Fig. 4) so that system incorporates integration options where they are most useful, in the areas of engineering, diagnosis, service and asset management - liberated

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from the specific communication technologies of the various field buses and the specific engineering environment of automation systems (PROFIBUS, page 27: User Benefits of FDT/DTM).

Regarding claim 3, Kadyk-PROFIBUS combination further taught the method as claimed in claim 4, further comprising the step of: providing an FDT frame application which runs in the control unit which serves as runtime environment for the software module (see [*PROFIBUS*, page 5: 2.4] "*The PROFIBUS Tool Box: PROFIBUS has a modular design and offers a range of communication technologies, numerous application and system profiles, as well as device management tools* ", see further fig. 7, 31).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicants' invention was made to modify the invention of Kadyk with the teaching of PROFIBUS for the use of FDT frame application because the use of PROFIBUS could be able to provide Kadyk the ability to include FDT frame application (PROFIBUS, page 27, fig. 31) in Kadyk's application module (Kadyk, Fig. 4) so that system incorporates integration options where they are most useful, in the areas of engineering, diagnosis, service and asset management - liberated from the specific communication technologies of the various field buses and the specific engineering environment of automation systems (PROFIBUS, page 27: User Benefits of FDT/DTM).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD L. RAHMAN whose telephone number is (571)270-7471. The examiner can normally be reached on Monday-Friday (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi T. Arani can be reached on (571)272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/M. L. R./

Examiner, Art Unit 2438

/Taghi T. Arani/

Supervisory Patent Examiner, Art Unit 2438